



TECHNOLOGIES INC

Nimble Storage vs Pure Storage: A Comparison Snapshot

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INTRODUCTION:

Founders incorporated Nimble Storage in 2008 with a mission to provide customers with exceptional enterprise application performance that would meet their increasing storage demands.

They believed flash, cloud and big data analytics were going to disrupt the storage market so they introduced several solutions over the years, including the integrated infrastructure solution, SmartStack, created with partner Cisco.

This versatile and predictive platform runs sustainably 24/7, allowing IT teams to free up important time and drive down OPEX without sacrificing performance.

You Will Discover a Side-by-side Comparison in the Following Areas:

- Performance & Capacity Efficiency
- Scalability & Integration
- Data Protection
- Solution Support & Simplicity
- Pricing
- Type of Business Solution is Best-Suited For



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INTRODUCTION CONT.:

A year later, John Colgrove and John Hayes founded their All-Flash storage upstart, Pure Storage, in October of 2009 with the goal to change the future frontier of data storage.

In the years since, the company's aggressive market strategy has catapulted them forward in this industry as they have reported rapid YoY growth.

You can see their name in several leading publications like Forbes and Bloomberg Businessweek. The paragraphs following usually describe an innovative solution due to Pure Storage's mission-driven work.

Their mission? To “erase the word ‘impossible’ from tomorrow.”



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Performance & Capacity Efficiency

How They Compare:

- **Nimble:**
 - Data reduction features
 - Nimble leverages disk-optimized data layout to deliver capacity density in addition to performance density.
 - * Sub-millisecond write latency
 - A Nimble solution can lower data center footprint by 6x.
 - Nimble's solution is easily and affordably scalable (with CS700 and AFS) to achieve comparable performance to an All-Flash solution.
 - Snapshots are efficient (compressed 4K) and offer a deep retention period (i.e. 90+ days).
 - Active/standby architecture guarantees consistent performance through failover.
 - Efficient use of flash
 - Nimble's flash space is used exclusively for active data.
- **Pure Storage:**
 - High IO throughput
 - Arrays operate with each controller at 50% resource utilization.
 - No performance loss when upgrading controller or doing maintenance.
 - Footprint optimization through dedupe and compression
 - All-Flash arrays offer substantial performance density.
 - Pure's layout relies heavily on dedupe for capacity efficiency. This doesn't always offer enough capacity optimization to justify the cost of all-flash.
 - Inefficient use of flash
 - Pure's flash space is consumed in part by parity data and snapshots.
 - Can employ flash to fit wide set of enterprise applications



Scalability & Integration

How They Compare:

- **Nimble:**
 - No forklift upgrade or PS engagement for scale-out capability
 - Automated load-balancing eliminates capacity silos and performance hotspots.
 - Simple, non-disruptive approach to system's life-cycle management of arrays.
 - Non-disruptive HW and SW upgrades.
 - Easily scale to capacity beyond the maximum capacity of Pure.
 - Scales performance and capacity independently and seamlessly to a cluster of up to 4 nodes.
- **Pure Storage:**
 - Non-disruptive upgrades
 - Through HW and SW
 - Inability to scale up, out and deep on the same platform.
 - Pure is limited to scaling flash only (max = 2 nodes / 2 expansion shelves.)
 - Less construction flexibility
 - Flash-only arrays are definitely effective for performance-intensive applications, but a majority of enterprise apps do not require more than 10-15% of data to reside in flash.
 - **Consideration:** Paying for flash that ends up being wasted on apps that can't use it all



Data Protection

How They Compare:

- **Nimble:**
 - Built-in snapshots/replication – no extra licensing needed
 - Replication leverages thin, space-efficient snapshots and offers different retention schedules on each side of a replication pair.
 - Advanced data protection with high performance & efficient triple parity RAID
 - Store 90+ days of storage snapshots.
 - Nearly a third of Nimble customers store 90 or more days of snaps on primary storage.
 - WAN-efficient replication
 - No re-hydration of replicated data
 - Only compressed, changed blocks are sent over the wire.
 - Protection is highly space-efficient
- **Pure Storage:**
 - Pure Storage offers integrated data protection with its All-Flash solution.
 - WAN-efficient replication
 - Not as comprehensive as Nimble’s protection offerings.
 - Lack of robust data protection features
 - Pure offers snapshots, but no scheduler of VS.
 - Portion of overall flash capacity consumed by RAID and snapshots, reducing the amount of flash that working set data can leverage.



Solution Support & Simplicity

How They Compare:

- **Nimble:**
 - Offers include deep-data performance analytics with InfoSight.
 - Proven availability across entire installed base
 - Single platform to manage: The CS-Series.
 - Offers simple provisioning with global space allocation
 - No aggregates, LUNs, qtrees, reserves, etc.
 - All software is included.
- **Pure Storage:**
 - Offers Forever Flash program to deliver more value.
 - Free controller upgrade
 - Three years with maintenance contract or reset maintenance terms on then-current pricing.
 - No proven 5x9s availability across base
 - No advanced performance analytics or health insights included.
 - Management and support are lacking.
 - * Only ASUPs, alerts and tunneling
 - * Clunky management interface



Pricing

How They Compare:

- **Nimble:**
 - Everything's included in the upfront solution price package.
 - There are no expensive or complicated software licenses to buy.
- **Pure Storage:**
 - \$/GB is HIGH (~\$15/GB RAW)
 - Need minimum 5:1 to be competitive w/ 15K SAS drive
 - Though Pure's dedupe and compression rates are impressive, its inefficient use of flash can lead to waste if certain apps cannot use all of it.
 - Could potentially lead to inefficient use of investment depending on infrastructure.



BEST-SUITED FOR

Take company specifics into consideration.

Both Nimble Storage and Pure Storage offer solutions with pros and cons that may benefit different companies in different ways. Because your businesses' storage needs and future goals are unique, one solution will seem like a better choice than the other.

We believe Nimble Storage is best-suited for:

Companies interested in a dynamic hybrid flash solution that offers out-of-house management in the form of predictive analytics, easing workload while keeping system robust and running 24/7.

We believe Pure Storage is best-suited for:

This option is suitable for companies that have a higher budget, don't need unlimited scalability, and don't mind the lacking support, data protection and enterprise application compatibility.

If you need help narrowing down your options, call and speak to one of our experienced sales associates today.



WE CAN HELP

CTC Technologies, Inc. Can Help With Your Next Steps To Implementing an Enterprise SAN Storage Solution.

Our team at CTC Technologies has implemented several SAN storage solutions for companies of all sizes in light of their growing storage demands and the increasing flash availability in today's market.

Whether you're looking for hybrid or all-flash storage, our sales team has the experience and the know-how to help you choose the right vendor, and our highly-skilled engineers can help implement whichever solution you choose.

We can help you find the perfect solution with respect to your budget, expected growth, physical data center space, storage demand and more.

Tell us a little more about your storage needs by [filling out our form](#) or giving us a call at 734.408.1993.

